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INSTRUCTION MANUAL

UNIPRESS porcelain press furnace

Warning

ATTENTION!

You have available one of the most precise dental ceramic furnaces equipped with a heating muffle made of quartz glass or ATC from the original manufacturer of this technology with an experience of more than 25 years.

IN ORDER TO PRESERVE THIS PRECISION AT ALL TIMES, PLEASE BE SURE TO ATTENTIVELY READ THE FOLLOWING INSTRUCTIONS PRIOR TO USING THE FURNACE!

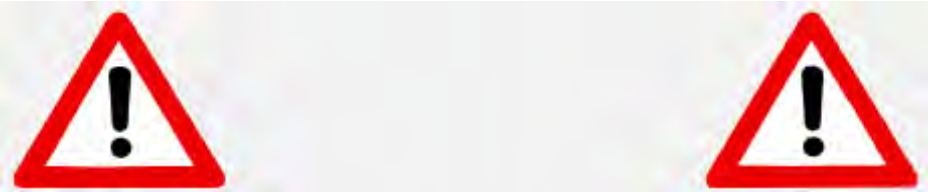
- Prior to carrying out maintenance work on the furnace or in case of mechanical failure, be sure to first make dead the device. To do so, switch the main switch (POWER) on the back of the furnace to OFF and pull the power-supply plug.
- Only qualified and experts recommended by the furnace supplier should open the furnace.
- All pumps connected to the furnace and those which may have been supplied by the manufacturer or by other suppliers must be provided with the CE symbol. In case of doubt, consult your furnace supplier.
- Be sure to only use ceramics and alloys that are provided for being used in dental furnaces.
- Certain parts of the furnace may run very hot during operation. Be sure to use the supplied twizzers.
- Do not attempt to open the furnaces without authorization since this will void the guarantee. For any necessary repair and maintenance work, consult your Shenpaz device servicing center.

- In case of a necessary replacement of fuses, proceed as follows:
  1) Pull the power-supply plug.
  2) Replace the fuse.
  3) Be sure the correct safety fuse parameter is indicated on the spare fuse.

- In case of an external power failure and when the furnace is in operation, proceed as follows:

  1) Pull the power-supply plug.

  2) Lower the support. To do so, insert the supplied crank into the hexagonal screw on the back of the furnace.



ATTENTION!

When operating the furnace a Ceramic table or pressure table must always be on the lift tray!

ATTENTION!

Take out the furnace with both hands. To do so, hold the bottom of the furnace with one hand and the top side with the other hand.

ATTENTION!

Do not pull out the furnace by its support in order to avoid damages.

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1. Installation

Unpacking:

Check the packaging of the furnace on any visible damage.

Check whether all components are present by means of the listing below:

- Ceramic Table
- Power cord
- Pump hose
- 8A fuse (for the heating)
- 5A fuse (for the pump)
- Instruction manual
- Twizzers
- Emergency 6-mm wrench

Additional Components of UNIPRESS :

- Pressure Table
- Cylinder press system, including 2 dies Plunger

Setting Up:

Place the furnace on a level surface and keep a distance of at least 10 cm. Keep combustible objects away from the furnace. Do not expose the furnace to direct sunlight in order to avoid possible damages of the LCD display. Protect the furnace from strong air circulation (such as ventilators), since this may result in fluctuations of the temperature display when opening the programs chamber.

Power Supply:

Connect the furnace to a grounded power socket. Be sure the parameters are in conformity with the electrical specifications of the UNIPRESS / model.

- ***Your furnace is equipped with the latest software recovery system. In case of electrical shut down, your cycle will fully be recovered within a temperature decrease not exceeding 150ºC degrees. For a temperature decrease more than this value, the cycle will be aborted to avoid unnecessary firing.***

Vacuum Pump:

Connect the power-supply plug and vacuum tube to the furnace.

Compressed Air:

Connect the furnace to a compressed-air system by means of a compressed-air tube. The maximum in-feed pressure should not exceed 8-10 bar. In order to avoid damages on the furnace, the compressed air must be absolutely dry.

2. Switches and Keys

Master Switch:

The master switch is on the back of the furnace. Put the switch on ON. An acoustic signal will sound.

Stand By/ On/Off

Press Stand By to switch on the furnace. The program overview display window appears.

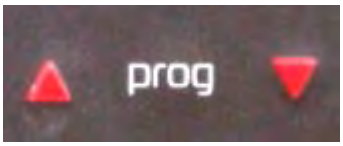
IMPORTANT NOTE:

The furnace must never be heated without its programs stand or pressure stand, respectively!

Alphanumeric Keys

Press these keys to enter parameters, the program numbers to be selected, the program names and to directly select single menu sub-entries.

Arrow Keys



- Control of lift *(press long, or release only after peep sound, respectively)*
- In the program overview display window: Selection of parameters to be entered or to be modified *(press short)*
- On the display, “Program List”: Selection of desired program
- In Menus: Selection of sub-entries

MENU Key

Press this key to go to the main menu.

START Key

Press this key to start the selected program.

STOP Key

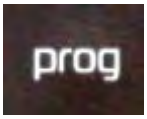
Press this key twice to abort the currently running program (safety query). The programs chamber opens up.

COPY/HoldKey

- Press this key to intervene in a currently running program. This function („Hold“ key) is used to modify a currently running program. The parameters imminent in the current program will be changed once. The saved program remains unchanged. Proceed as follows:
  1. Press the key (the program is interrupted)
  2. Press the arrow and numeric keys to modify the program parameters.
  3. Press ENTER to confirm.
  4. Press this key again to resume the program.

- In idle state, the programs can be copied onto another program digit („COPY“ key). To copy an existing program, proceed as follows:
  1. Select the program to be copied
  2. Press the key.
  3. Enter destination with numeric keys.
  4. Press ENTER to confirm.

Program Key



After pressing this key, a program number can directly be selected; to do so, press the numeric key/ENTER.

Switching to Graphic Representation and back

Press this key to switch the display into a graphic representation. Press this key again to display a list.

F2 – Special Function

- Press this key in standby mode to activate the diagnosis mode.
- Press this key in the operation mode to call up the Name Editor.

F1 – Help Key

Press this key to call up a help text with reference to the current program.

Key for Subsequent Programs (Soldering in the Furnace)

Press this special key to:

- conveniently carry out a subsequent soldering after soldering in the furnace
- activate the automatic pressing mode

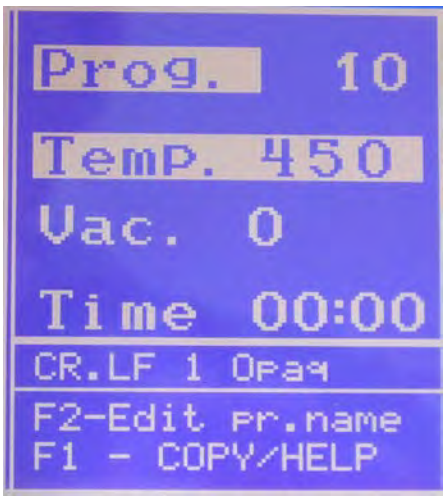
3. Functions and Displays

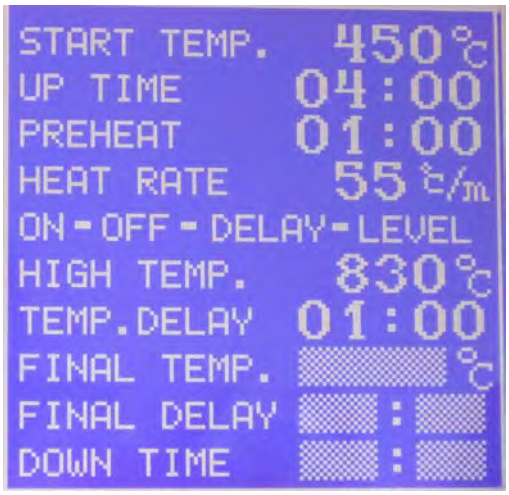
Program Overview Display Window

This display is divided up in different sections:

The status section is on the left side of the display and shows the respectively current status.

All parameters of the program are displayed on the right display page.

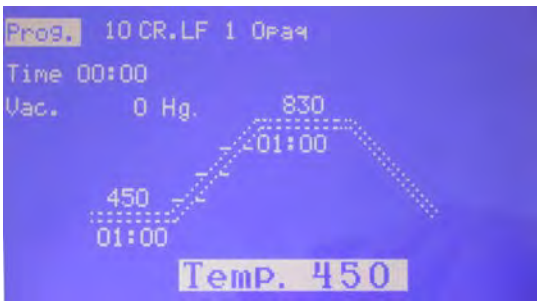




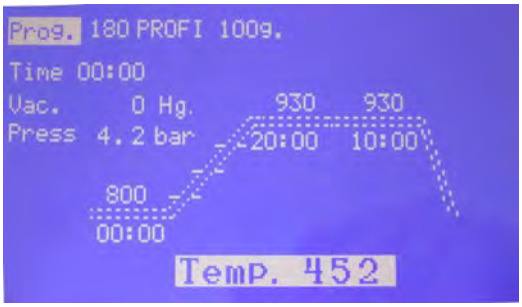
The vacuum parameters are displayed between two Horizontal lines and in the center of the display.

Graphic Representation

This picture shows a graphic representation of the currently running program and its parameters. When selecting a pressing program (UNIPRESS), the pressure level will be indicated here as well.



Normal's program



Pressing program

Modes

- On UNIPRESS, the program digits 1 – 200 are available for the „programs" mode.
- Unlike the above, the program digits 180 – 200 on UNIPRESS are configured in advance for the „pressing"mode.

Choice of Programs and Starting the Program

Press the PROG key and select the program numbers by means of the numeric keys. Press ENTER to confirm your selection. Press the START key to start the program now. The current work progress will flash when the program is running. Once the program is completed, the programs chamber opens up and gives off an acoustic sound. The current programs program will end a few seconds later.

You may also chose a program from the list of the programs press enter on the chosen program press enter the program will be upload automatically and ready to use, from this screen you may activate the program by pressing the start button or modified the parameter before the Start of the program

Pre-heating Program

Important note:

During transportation, storage and non-use, the isolation may absorb humidity. In order to avoid damages on the vacuum and heating system and in order to always obtain reproducible programs results, the user should always run the pre-heating program (program digit 01) at first and in the beginning. This is always recommended if the furnace has been completely cooled down after operation.

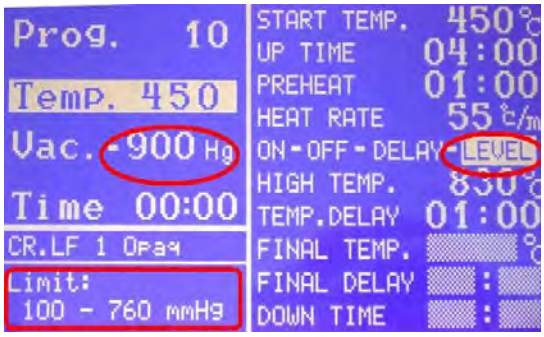
Editing the Program Name

In order to edit the program name, press F2 in the program overview display window. Then enter the program name by means of the alphanumeric keys. The cursor will be shifted by way of pressing the arrow keys (right/left). Press the START key to shift between the upper and lower case.

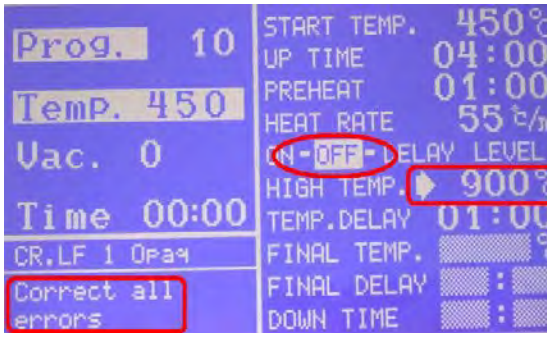
Editing the Program Contents

1. Press the arrow keys to select the parameters.
2. Press the numeric keys to enter the parameters.
3. To edit further parameters, follow the steps 1 and 2 above.
4. Press ENTER to confirm.

Vacuum → values up to 755 mmHg = pump is running when needed → 760 mmHg = permanent operation of pump



If non-convertible parameters are entered, an acoustic signal will sound and the automatic help program suggests possible parameters.



If reference errors occur, the digits concerned will be highlighted and a prompt request for correction appears.

Menu

Press the MENU key to go to the main menu with its three sub-entries:

Press the numeric keys to directly make your selection.

1. Program List:

This list shows an overview over all programs/pressing programs.

Press the arrow keys to scroll through the list. You may also directly select a program through pressing the numeric keys.

The program highlighted through this can optionally be started directly by way of pressing the START key or be called up by way of pressing the ENTER key for viewing/editing.

The program digits 180 to 200 are provided for entering the pressing programs (only UNIPRESS)

2. Options

Apart from presetting the language, this is to preset the physical units. Moreover, it is possible to activate an automatic rapid cooling of the programs chamber by means of the vacuum pump.

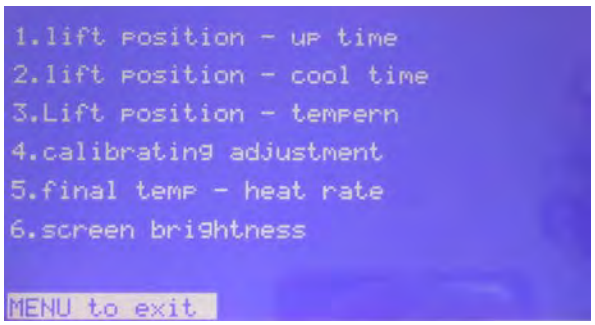
Press the arrow keys to select or press the numeric keys for direct selection.

Press ENTER to activate/deactivate.

3. Settings

Press the numeric keys to select.

This is to set the lift positions, to precision-calibrate the heating, and if need be, to edit a second heating rate, as well as to individually define the pressure intervals (if necessary) on UNIPRESS II.



1. *Lift Positions – Closing* (program-specific)

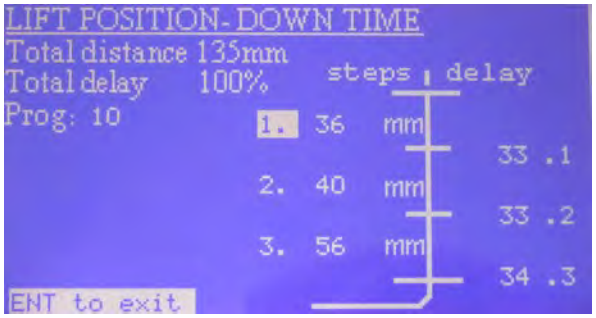
   In the parameter screen, when the up time is high light and a program is chosen, you can enter this setup automatically by pressing the menu Key

Selection of lift parameters when closing.

Press the arrow keys, numeric keys and ENTER to edit. The respective lift path is edited in the left column, whereas the halt periods are edited in % in the right column (relative to the complete "lift closed" time of the respective program).

2. *Lift Positions – Opening* (program-specific)

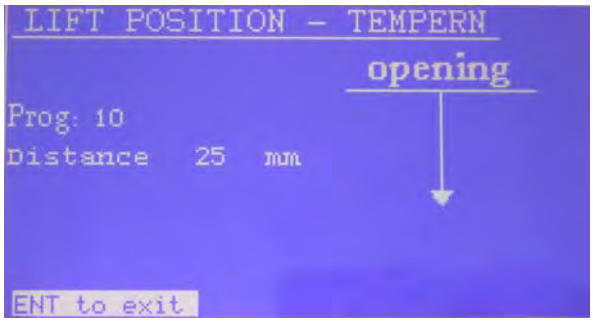
   In the parameter screen, when the cool time is high light and a program is chosen, you can enter this setup automatically by pressing the menu Key



Selection of lift parameters when opening.

Press the arrow keys, numeric keys and ENTER to edit. The respective lift path is edited in the left column, whereas the halt periods are edited in % in the right column (relative to the complete "lift open" time of the respective program).

3. Lift Positions – Tempering (program-specific)



Selection of lift position when tempering.

Press the numeric keys and the ENTER key to edit.

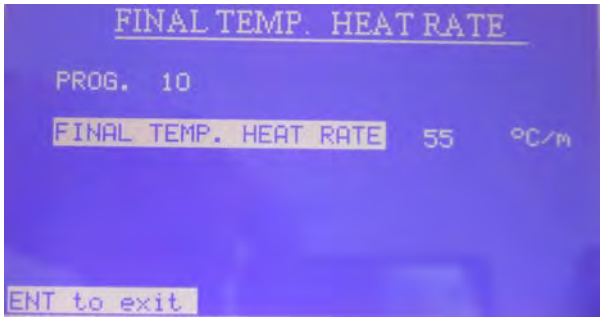
4. Calibrating (not program-specific)

Since fluctuations in the temperature may occur due to various influences, it is recommended to regularly check the programs temperature (such as with a silver assay, transparence wedge, etc.).

Press the arrow keys do carry out a possibly necessary precision-calibration (shifting between plus and minus) and press the arrow keys to set in degrees (Celsius).

Press the PROG and then the ENTER key to confirm.

5. Second Heating Rate (tempering) (program-specific)



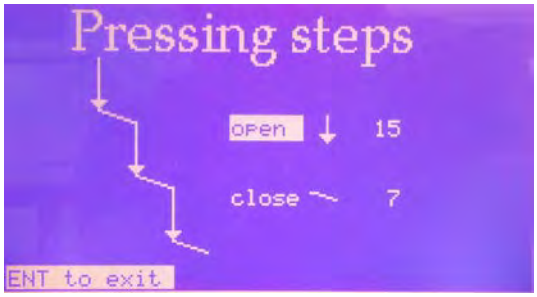
After reaching the final temperature, this second heating rate allows for heating up to a higher temperature (this eliminates the possibility of a tempering stage in this program).

It will not be necessary during classical tempering to edit the second heating rate.

Press the numeric keys and the ENTER key to enter.

5. *Pressing Steps*

In the parameter screen , when the Press delay is high light and a program is chosen, you can enter this setup automatically by pressing the menu Key



Unlike numerous ceramic pressing furnaces, UNIPRESS II uses a pressure method that heightens the homogeneity of compressed ceramics and which minimizes the risk of muffle bursting.

The amount of pressure applied is reduced and subsequently increased in regular intervals during the pressing procedure.

Press the arrow keys and numeric keys to individually define these interval steps, if needed.

4. Special Functions

Help Mode

Press the F1/HELP key to call up a sub-menu with reference to the current display.

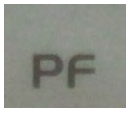
Subsequent Programs

Press the Subsequent Programs key to immediately close the furnace again. This can be done a short time (approx. 2 seconds) after the lift has opened the furnace at the end of a program. The heating restarts at the same time and surpasses the original final temperature by 5°C. The temperature is increased by another 3°C each time the Subsequent Programs key is pressed.

Indication:

If the solder is not „closed“ when soldering in the furnace, this function allows for a convenient subsequent soldering without the need to change any parameter of the program.

Automatic Pressure Mode (UNIPRESS)



Press this key to activate / deactivate the automatic pressure mode before lunching cycle once the pressing program has been called up. In this mode, the pressing system monitors the filling density of the pressing muffle during different pressing intervals. If the pressing muffle is completely filled, the pressing program will be terminated earlier, which will distinctly shorten the entire procedure. The letter "PF" will appear in the program name when activate

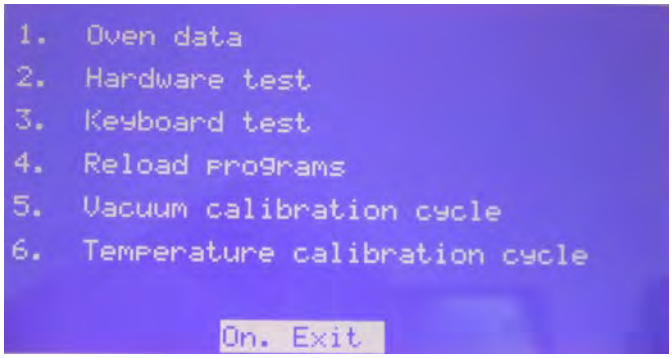
Night Mode

In order to considerably extend the life of the heating, keep a constant temperature of 100°C. There are two methods to start the night mode:

1. Start the program „0“ to activate the „normal Night Mode“.
2. The „automatic Night Mode“ will be started only when the program is running, if the ON/OFF key is pressed when said program is running. Press the ON/OFF key again to deactivate the „automatic Night Mode“.

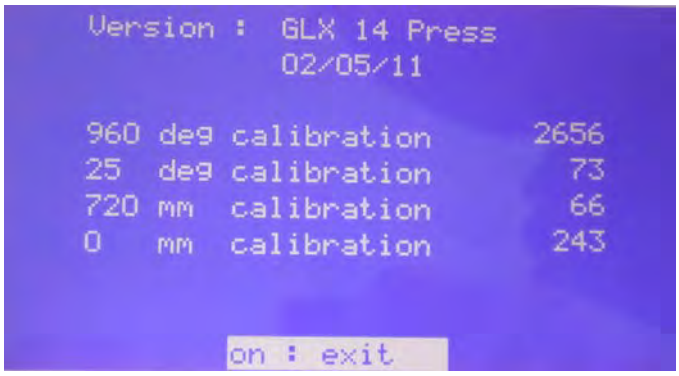
5. Diagnosis Menu

Press the F2 key to call up the diagnosis menu when the standby mode of the furnace has been activated (the furnace name is shown in the display).
Press the respective numeric key to call up the desired function.



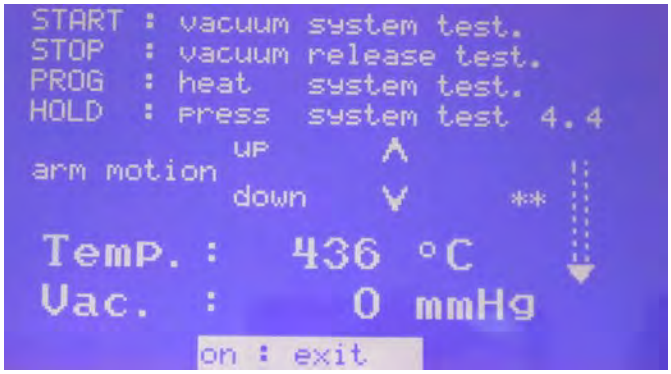
Overview display window with the diagnosis tools available for selection

1. Device Data



This is to show the basic data of the furnace. These data show important notes in case of a possible failure or error. Moreover, the software version as well as the calibration values will appear.

2. Hardware Test



This is to check the individual components.
Press the COPY key to test the press die. The amount of pressure applied (in bar) appears on the same line.

3. Keyboard Test

This diagnosis function is used to check the keyboard and to determine the proper functioning of all keys.

The keyboard is shown on the display.

To carry out the test, press each key once and check whether the respective symbol appears on the display.

4. Restoring all Programs

The programs and setting data including the lift parameters set by the manufacturer will be restored again, if they have been changed during operation. To do so, press the numeric key 4 in the diagnosis menu. The preset default programs will be restored after a few minutes.

Note: Your furnace is ready to use with a Fix setup, you may modified and upload any other brand of ceramics programs, to do this press "00" on the logo screen chose option 6 load programs, this function should be done preferably by your technical staff .

The program chosen in inverse mode will be upload into the furnace

To chose a row press enter on each row and continue to the next one request

After all you choice press On/off and then start all the program will be upload.

Warning:

This operation will erase the program into the furnace

5. Vacuum Calibration

This is a servicing function which should exclusively be carried out by a device expert only.

6. Temperature Calibration

This is a servicing function which should exclusively be carried out by a device expert only.

6. Technical Data

General:

Dimensions	
Muffle chamber	Dia.95 mm x 60 mm
Combustion Table	Dia. 90 mm
Net Weight	26 Kg
Heating Speed	230 V from 10 to 100 ° C 115V from 10 to 100 °C
Pump capacity	230 5 A
Mains voltage	230 V 1750 W 50/60 Hz 115V 1400 W 50/60 Hz
Temperature Pickup	
Vacuum Level	Up to 980 mbar Up to 740 mmHg
Time	In Min and Sec mm:ss
Temperature	Range 100 ° to 1180 ° Centigrade

Transportation and storing conditions

Temperature	0°C to 40°C
Relative air humidity	Less than 100 % rel. humidity

Operating condition

Temperature	10°C to 40°C
Air Humidity	80 % rel. Humidity up to 31 °C

7. Putting out of Commission and Disposal

For an environmental-friendly disposal, please bring this device to a recycling collection point for metal and electronic products or return it to the manufacturer.

Notes

8. Distribution and Technical Service

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Version: 01
Technical and visual amendments reserved. Shenpaz 01/05/11

Drawing up of Instruction Manual:
05/2011

This device has been developed for its use in the dental scope and should be used as described in the instruction manual. The manufacturer will not accept any liability for damages resulting from any other use than described in this manual or resulting from misuse or abuse. Moreover, it is the user's responsibility to check the device on his own responsibility on its suitability and its possible use for the intended purposes prior to its use, above all if said purposes are not described in the instruction manual. This will also apply if the device will be used in combination with products from competitors.

9. Pre-Installed Programs / Overview

		start temp	up time	preheat	heat rate	on	off	delay	level	high temp	delay	final temp	delay	down time
Default	Night program	300												
	Pre-drying prog.	500	3:00	1:00	40					950	5:00			
Load prog MC	AV-Liner	580	2:00	1:00	80	580	950		760	950	1:00			
	AV-Schulter	600	2:00	1:00	80	600	950		760	950	1:00			
	AV-1. Dentin	580	6:00	1:00	55	580	910		760	910	1:00			
	AV-Korrektur	580	6:00	1:00	55	580	900		760	900	1:00			
	AV-Glanz	600	2:00	1:00	55					910				
	AV-Glanz m. Glasr	480	2:00	1:00	45					880	1:00			
	ZI-Liner	450	2:00	1:00	55	450	900		730	900	1:00			
	ZI-Schulter	450	4:00	1:00	55	450	830		730	830	1:00			
	ZI-1. Dentin	450	6:00	1:00	45	450	810		730	810	1:00			
	ZI-Korrektur	450	6:00	1:00	45	450	800		730	800	1:00			
	ZI-Glanz	480	2:00	1:00	45					820				
	ZI-Glanz m. Glasu	480	2:00	1:00	45					790	1:00			
	LF-1. Opaquer	450	4:00	1:00	55	450	830		760	830	1:00			
	LF-2. Oaquer	450	4:00	1:00	55	450	820		760	820	1:00			
	LF-Schulter	450	4:00	1:00	45	450	810		760	810	1:00			
	LF-1. Dentin	450	6:00	1:00	45	450	770		760	770	1:00			
	LF-Korrektur	450	6:00	1:00	45	450	760		760	760	1:00			
	LF-Glanz	480	2:00	1:00	45					780				
	LF-Glanz m. Glasu	480	2:00	1:00	45					750	1:00			
	MC-WOP Opak	550	6:00	1:00	80	550	950		760	950	1:00			
	MC-Wash Creapast	550	6:00	1:00	80	550	980		760	980	1:00			
	MC-Wash Pulver Po	600	2:00	1:00	80	600	980		760	980	1:00			
	MC-Opaque Creapa	550	6:00	1:00	80	550	950		760	950	1:00			
	MC-Opaquer Pulver	600	2:00	1:00	80	600	950		760	950	1:00			
	MC-1+2.Schulter S	600	2:00	1:00	80	600	950		760	950	1:00			
	MC-Dentin B, Dent	580	6:00	1:00	55	580	920		760	920	1:00			
	MC-Korr. Brand Co	580	4:00	1:00	55	580	910		760	910	1:00			
	MC-Glanzbrand Gl	600	2:00	1:00	55					930				

		start temp	up time	preheat	heat rate	on	off	delay	level	high temp	delay	final temp	delay	down time
Prog Creation	CR.CreaAlloyBond	550	6:00	1:00	80	550	980		730	980	1:00			
	GC.IN Metalbond	550	6:00	1:00	80	550	980		730	980	1:00			
	CR.AV Liner	580	2:00	1:00	80	580	950		730	950	1:00			
	CR.AV Shoulder	600	2:00	1:00	80	600	950		730	950	1:00			
	CR.AV 1 Dentin	580	6:00	1:00	55	580	910		730	910	1:00			
	CR.AV Correction	580	6:00	1:00	55	580	900		730	900	1:00			
	CR.AV Glaze	600	2:00	1:00	55					910				
	CR.AV Glaze w.gl.	480	2:00	1:00	45					880	1:00			
	CR.LF 1 Opaq	450	4:00	1:00	55	450	830		730	830	1:00			
	CR.LF 2 Opaq	450	0:00	1:00	55	450	820		730	820	1:00			
	CR.LF Shoulder	450	4:00	1:00	45	450	810		730	810	1:00			
	CR.LF 1 Dentin	450	6:00	1:00	45	450	770		730	770	1:00			
	CR.LF Correction	450	6:00	1:00	45	450	760		730	760	1:00			
	CR.LF Glaze	480	2:00	1:00	45					780				
	CR.LF Glaze w.gl.	480	2:00	1:00	45					750	1:00			
	CR.CC WOP Opaq	550	6:00	1:00	80	550	950		730	950	1:00			
	CR.CC Wash Cr.p	550	6:00	1:00	80	550	980		730	980	1:00			
	CR.CC Wash powd	600	2:00	1:00	80	600	980		730	980	1:00			
	CR.CC Opaq Cr.p	550	6:00	1:00	80	550	950		730	950	1:00			
	CR.CC Opaq powd	600	2:00	1:00	80	600	950		730	950	1:00			
	CR.CC 1+2 Should.	600	2:00	1:00	80	600	950		730	950	1:00			
	CR.CC 1 Dentin	580	6:00	1:00	55	580	920		730	920	1:00			
	CR.CC Correction	580	4:00	1:00	55	580	910		730	910	1:00			
	CR.CC Claze	600	2:00	1:00	55					930				
	CR.ZI Liner	450	2:00	1:00	55	450	900		730	900	1:00			
	CR.ZI Schulter	450	4:00	1:00	55	450	860		730	860	1:00			
	CR.ZI 1. Dentin	450	6:00	1:00	45	450	810		730	810	1:00			
	CR.ZI Korrektur	450	6:00	1:00	45	450	800		730	800	1:00			
	CR.ZI Glanz	480	2:00	1:00	45					820				
	CR.ZI Glanz w.gl	480	2:00	1:00	45					790	1:00			
Load prog GC	GC.AL Liner	580	2:00	1:00	80	580	950		730	950	1:00			
	GC.AL Shoulder	600	2:00	1:00	80	600	950		730	950	1:00			
	GC.AL 1 Dentin	580	6:00	1:00	55	580	910		730	910	1:00			
	GC.AL Correction	580	6:00	1:00	55	580	900		730	900	1:00			

		start temp	up time	preheat	heat rate	on	off	delay	level	high temp	delay	final temp	delay	down time
Load prog GC	GC.AL Glaze	600	2:00	1:00	55					910				
	GC.AL Glaze w.gl.	480	2:00	1:00	45					880	1:00			
	GC.AL Correction	450	4:00	1:00	45	450	790		730	790	1:00			
	GC.LF 1 Opaq	450	4:00	1:00	55	450	830		730	830	1:00			
	GC.LF 2 Opaq	450	4:00	1:00	55	450	820		730	820	1:00			
	GC.LF Shoulder	450	4:00	1:00	45	450	810		730	810	1:00			
	GC.LF 1 Dentin	450	6:00	1:00	45	450	770		730	770	1:00			
	GC.LF Correction	450	6:00	1:00	45	450	760		730	760	1:00			
	GC.LF Glaze	480	2:00	1:00	45					780				
	GC.LF Glaze w.gl.	480	2:00	1:00	45					750	1:00			
	GC.LF Correction	400	4:00	1:00	45	400	690		730	690	1:00			
	GC.MC 1 Powd Opaq	600	2:00	1:00	80	600	940		730	940	1:00			
	GC.MC 2 Powd Opaq	600	2:00	1:00	80	700	930		730	930	1:00			
	GC.MC 1 PasteOpaq	550	6:00	1:00	80	550	940		730	940	1:00			
	GC.MC 2 PasteOpaq	550	6:00	1:00	80	550	930		730	930	1:00			
	GC.MC Shoulder	550	2:00	1:00	80	550	930		730	930	1:00			
	GC.MC 1 Dentin	580	6:00	1:00	55	580	890		730	890	1:00			
	GC.MC Correction	580	6:00	1:00	55	580	880		730	880	1:00			
	GC.MC Glaze	600	2:00	1:00	55					890	1:00			
	GC.MC Gl w.gl.	480	2:00	1:00	45					850	1:00			
	GC.MC Correction	450	4:00	1:00	45	450	770		730	770	1:00			
	GC.TI 1 Bonder	450	4:00	1:00	55	450	810		730	810	1:00			
	GC.TI 1 Opaq	450	4:00	1:00	55	450	810		730	810	1:00			
	GC.TI 2 Opaq	450	4:00	1:00	55	450	810		730	810	1:00			
	GC.TI Shoulder	450	4:00	1:00	45	450	810		730	810	1:00			
	GC.TI 1 Dentin	400	6:00	1:00	45	500	780		730	780	1:00			
	GC.TI Correction	400	6:00	1:00	45	400	775		730	775	1:00			
	GC.TI Glaze	450	2:00	1:00	45					785	1:00			
	GC.TI Glaze w.gl.	480	2:00	1:00	45					780	1:00			
	GC.TI Correction	450	4:00	1:00	45	450	690		730	690	1:00			
	GC.ZR Shoulder	450	4:00	1:00	45	450	830		730	830	1:00			
	GC.ZR Frame m.	450	4:00	1:00	55	450	800		730	800	1:00			
	GC.ZR 1 Dentin	450	6:00	1:00	45	450	810		730	810	1:00			
	GC.ZR Correction	450	6:00	1:00	45	450	800		730	800	1:00			

		start temp	up time	preheat	heat rate	on	off	delay	level	high temp	delay	final temp	delay	down time
	GC.ZR Glaze	480	2:00	1:00	45					820				
	GC.ZR Glaze w.gl.	480	2:00	1:00	45					790	1:00			
	GC.ZR Correction	450	4:00	1:00	45	450	690		730	690	1:00			
Load prog Vita	VITA.OMEGA.PST.OP	500	8:00		75	500	910		720	910	1:00			
	VITA.OMEGA.POW.OP	600	2:00		75	600	900		720	900	1:00			
	VITA.OMEGA.DENT 1	600	6:00		50	600	900		720	900	1:00			
	VITA.OMEGA.DENT 2	600	6:00		48	600	890		720	890	1:00			
	VITA.OMEGA.GLAZE	600	4:00		75					900	2:00			
prog Ivoclar	IV.D.SIGN.PST OP1	400	9:00		80	400	900		720	900	1:00			
	IV.D.SIGN.PST OP2	400	9:00		80	400	890		720	890	1:00			
	IV.D.SIGN.DENT 1	450	7:00		60	450	870		720	870	1:00			
	IV.D.SIGN.DENT 2	450	7:00		60	450	870		720	870	1:00			
	IV.D.SIGN.GLAZE	450	4:00		60	450	870		720	870	0:50			
prog Ceramco	CERAMCO 3.PST OP	450	8:00	3:00	100	500	975		720	975				
	CERAMCO 3.PWD OP	650	3:00	3:00	70	650	970		720	970				
	CERAMCO 3.MARGIN	650	5:00	5:00	70	650	965		720	965				
	CERAMCO 3.DENT 2	650	5:00	5:00	45	650	930		720	930				
	CERAMCO 3.GLAZE	650	3:00	3:00	45					920	0:30			
prog Finesse	FINESSE.PASTE OP	420	8:00	3:00	90	450	790		720	790				
	FINESSE.POWDER OP	450	3:00	3:00	90	450	800		720	800	1:00			
	FINESSE.DENTIN 1	450	5:00	5:00	35	450	760		720	760	0:30			
	FINESSE.DENTIN 2	450	5:00	5:00	35	450	750		720	750				
	FINESSE.GLAZE	450	3:00	3:00	70					750				
prog klema rosi	P.L 1st OPAQUER	490	7:00		75	490	945		720	945	1:00			
	P.L 2nd OPAGUER	490	7:00		75	490	935		720	935	1:00			
	P.L MARGIN	520	4:00	4:00	60	520	925		720	925	1:00			
	P.L 1st DENTIN	510	7:00		50	510	890		720	890	1:00			
	P.L 2nd DENTIN	510	7:00		50	510	880		720	880	1:00			
	P.L STAINS/GLASE	480	2:00		45	480	850		720	850	1:00			
	P.L CORRECTUR	415	7:00		40	415	770		720	770	1:00			
	P.G 1st DENTIN	450	6:00		45	450	770		720	770	1:00			
	P.G 2nd dENTIN	450	6:00		45	450	760		720	760	1:00			
	P.G STAINS/GLASE	450	4:00		45					750	1:00			
	P.G CORRECTUR	410	5:00		40	410	685		720	685	1:00			

		start temp	up time	preheat	heat rate	on	off	delay	level	high temp	delay	final temp	delay	down time
prog klema rosi	Zirk MARGIN	410	3:00		40	410	835		720	835	1:00			
	Zirk LINER	410	3:00		40	410	805		720	805	1:00			
	Zirk 1st DENTIN	410	7:00		40	410	815		720	815	1:00			
	Zirk 2nd DENTIN	410	5:00		40	410	805		720	805	1:00			
	Zirk STAINS/GLASE	450	3:00		40					790	1:00			
	Zirk CORRECTUR	410	4:00		40	410	700		720	700	1:00			
prog Shofu	SHOFU.HALO.PST OP	450	8:00		60	450	950		730	950	1:00			
	SHOFU.HALO.PWD OP	650	3:00		60	650	950		730	950	1:00			
	SHOFU.HALO.DENT 1	650	5:00		60	650	910		720	910	1:00			
	SHOFU.HALO.DENT 2	650	5:00		60	650	905		720	905				
	SHOFU.HALO.GLAZE	650	5:00		60					900	0:50			
	SHOFU 1	500			90					1000	5:00			
	SHOFU 2	700	1:00		90	700		5:00	720	960	5:00			
	SHOFU 3	700	1:00		90					960	5:00			
	SHOFU 4	700	1:00		90	700		5:00	720	1000	5:00			
	SHOFU 5	700	1:00		90					1000	5:00			
	SHOFU 6	650	1:00		60					1000	5:00			
	SHOFU 7	650	1:00		60					1000	5:00			
	SHOFU 8	500	5:00		50					850				
	SHOFU 9	500	5:00		50	600		2:00	720	950	2:00			
	SHOFU 10	500	7:00		50	600		1:00	720	940	1:00			
	SHOFU 11	500	7:00		50	600		1:00	720	930	1:00			
	SHOFU 12	650	5:00		50	700	930		720	930				
	SHOFU 13	650	3:00		50	700	880		720	880				
	SHOFU 14	650	5:00		50	700	920		720	920				
	SHOFU 15	650	5:00		50	700	910		720	910				
	SHOFU 16	650	5:00		50	680	875		720	875				
	SHOFU 17	650	5:00		50					900				
	SHOFU 18	450	5:00		50					770				
	SHOFU 19	500	7:00		45	600		1:00	720	940	1:00			
	SHOFU 20	650	5:00		45	700		1:00	720	1040	1:00			
	SHOFU 21	650	3:00		45	700		1:00	720	880	1:00			
	SHOFU 22	650	5:00		45	700		1:00	720	910	1:00			
	SHOFU 23	650	5:00		45	700		1:00	720	900	1:00			

		start temp	up time	preheat	heat rate	on	off	delay	level	high temp	delay	final temp	delay	down time
prog Shofu	SHOFU 24	650	5:00		45	680		1:00	720	870	1:00			
	SHOFU 25	650	5:00		60					890				
	SHOFU 26	650	5:00		45					860	1:00			
	SHOFU 27	500	7:00		45	600		1:00	720	940	1:00			
	SHOFU 28	650	5:00		45	700		1:00	720	970	1:00			
	SHOFU 29	650	3:00		45	700		1:00	720	880	1:00			
	SHOFU 30	650	5:00		45	700		1:00	720	910	1:00			
	SHOFU 31	650	5:00		45	700		1:00	720	900	1:00			
	SHOFU 32	650	5:00		45	680		1:00	720	870	1:00			
	SHOFU 33	650	5:00		60					890				
	SHOFU 34	650	5:00		45					860	1:00			
	SHOFU 35	450	5:00	1:00	50	550	950		720	950				
	SHOFU 36	450	7:00	1:00	50	550	940		720	940				
	SHOFU 37	650	1:00		50	700	950		720	950				
	SHOFU 38	650	3:00		50	700	940		720	940				
	SHOFU 39	650	3:00		50	700	940		720	940				
	SHOFU 40	4650	3:00		50	700	880		720	880				
	SHOFU 41	650	5:00		50	700	925		720	925				
	SHOFU 42	650	5:00		50	700	910		720	910				
	SHOFU 43	650	5:00		50					905				
	SHOFU 44	650	5:00		50					870				
	SHOFU 45	650	1:00		50	700	960		720	960				
	SHOFU 46	650	3:00		50	700	950		720	950				
	SHOFU 47	650	3:00		50	700	890		720	890				
	SHOFU 48	650	5:00		50	700	935		720	935				
	SHOFU 49	650	5:00		50	700	920		720	920				
	SHOFU 50	650	5:00		50					910				
prog Noritake	EX1	400	8:00		105	400	980		760	980	1:00			
	EX2	400	8:00		105	400	980		760	980	1:30			
	EX3	550	7:00		50	550	925		760	925				
	EX4	550	7:00		50	550	925		760	925				
	EX5	500	7:00		45	500	915		760	915				
	EX6	500	7:00		45	500	905		760	905				
	EX7	600	5:00		55					800				

	start temp	up time	preheat	heat rate	on	off	delay	level	high temp	delay	final temp	delay	down time	
prog Noritake	EX8	500	5:00		55	570	850		760	850				
	EX9	550	5:00		50					915				
	EX10	550	5:00		55					880				
	EX11	550	7:00		50	550	1000		750	1000	1:00			4:00
	EX12	500	5:00		45	500	915		750	915	1:00			4:00
	EX13	500	7:00		45	500	915		750	915	1:00			4:00
	EX14	500	7:00		45	500	915		750	915	0:30			4:00
	EX15	550	5:00		50					880				4:00
	EX16	550	5:00		50					915	0:30			4:00
	EX17	550	5:00		50					915				4:00
Load prog RU	RU1	400	8:00		105	400	980		760	980	1:30			
	RU2	400	8:00		105	400	980		760	980	1:30			
	RU3	550	7:00		50	550	925		760	925				
	RU4	550	7:00		50	550	925		760	925				
	RU5	500	7:00		45	500	915		760	915				
	RU6	500	7:00		45	500	905		760	905				
	RU7	600	5:00		55					800				
	RU8	500	5:00		55	570	850		760	860				
	RU9	550	5:00		50					915				
	RU10	550	5:00		55					880				
	RU11	570	7:00		50	550	1000		750	1000	1:00			4:00
	RU12	500	5:00		45	500	915		750	915	1:00			4:00
	RU13	500	7:00		45	500	915		750	915	1:00			4:00
	RU14	500	7:00		45	500	915		750	915	0:30			4:00
	RU15	550	5:00		50					880				4:00
	RU16	550	5:00		50					915	0:30			4:00
	RU17	550	5:00		50					915				4:00